

## PIEZOELECTRIC DEVICE AND MANUFACTURE THEREOF

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### Abstract of JP11168248

**PROBLEM TO BE SOLVED:** To provide a piezoelectric device which is sintered at a low temperature and high in piezoelectric characteristics and where electrodes of Ag-Pd alloy or the like can be used.  
**SOLUTION:** The piezoelectric body of a piezoelectric element is formed through a manner where at maximum 5 mol.% lead oxide, silver oxide, and bismuth oxide or a mixture of them is mixed as additive into material powder whose composition is represented by a formula,  $a\text{PbNi}_{1/3}\text{Nb}_{2/3}\text{O}_3 - b\text{PbTiO}_3 - c\text{PbZrO}_3$  (where  $0.4 < a < 0.6$ ,  $0.25 < b < 0.45$ ,  $0.05 < c < 0.25$ , and  $a+b+c=1$ ) for the formation of piezoelectric material powder, and the piezoelectric material powder is intered into a piezoelectric body where the additive component is removed.

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